



Tyr Lys Ile Thr Gln Val Leu Phe Pro Leu Leu Tyr Thr Val Leu Phe  
25 30 35

ttt gtt gga ctt atc aca aat ggc ctg gcg atg agg att ttc ttt caa 381  
Phe Val Gly Leu Ile Thr Asn Gly Leu Ala Met Arg Ile Phe Phe Gln  
40 45 50

atc cgg agt aaa tca aac ttt att att ttt ctt aag aac aca gtc att 429  
Ile Arg Ser Lys Ser Asn Phe Ile Ile Phe Leu Lys Asn Thr Val Ile  
55 60 65

tct gat ctt ctc atg att ctg act ttt cca ttc aaa att ctt agt gat 477  
Ser Asp Leu Leu Met Ile Leu Thr Phe Pro Phe Lys Ile Leu Ser Asp  
70 75 80

gcc aaa ctg gga aca gga cca ctg aga act ttt gtg tgt caa gtt acc 525  
Ala Lys Leu Gly Thr Gly Pro Leu Arg Thr Phe Val Cys Gln Val Thr  
85 90 95 100

tcc gtc ata ttt tat ttc aca atg tat atc agt att tca ttc ctg gga 573  
Ser Val Ile Phe Tyr Phe Thr Met Tyr Ile Ser Ile Ser Phe Leu Gly  
105 110 115

ctg ata act atc gat cgc tac cag aag acc acc agg cca ttt aaa aca 621  
Leu Ile Thr Ile Asp Arg Tyr Gln Lys Thr Thr Arg Pro Phe Lys Thr  
120 125 130

tcc aac ccc aaa aat ctc ttg ggg gct aag att ctc tct gtt gtc atc 669  
Ser Asn Pro Lys Asn Leu Leu Gly Ala Lys Ile Leu Ser Val Val Ile  
135 140 145

tgg gca ttc atg ttc tta ctc tct ttg cct aac atg att ctg acc aac 717  
Trp Ala Phe Met Phe Leu Leu Ser Leu Pro Asn Met Ile Leu Thr Asn  
150 155 160

agg cag ccg aga gac aag aat gtg aag aaa tgc tct ttc ctt aaa tca 765  
Arg Gln Pro Arg Asp Lys Asn Val Lys Lys Cys Ser Phe Leu Lys Ser  
165 170 175 180

gag ttc ggt cta gtc tgg cat gaa ata gta aat tac atc tgt caa gtc 813  
Glu Phe Gly Leu Val Trp His Glu Ile Val Asn Tyr Ile Cys Gln Val

185

190

195

att ttc tgg att aat ttc tta att gtt att gta tgt tat aca ctc att 861  
Ile Phe Trp Ile Asn Phe Leu Ile Val Ile Val Cys Tyr Thr Leu Ile

200

205

210

aca aaa gaa ctg tac cgg tca tac gta aga acg agg ggt gta ggt aaa 909  
Thr Lys Glu Leu Tyr Arg Ser Tyr Val Arg Thr Arg Gly Val Gly Lys  
215 220 225

gtc ccc agg aaa aag gtc aac gtc aaa gtt ttc att atc att gct gta 957  
Val Pro Arg Lys Lys Val Asn Val Lys Val Phe Ile Ile Ile Ala Val  
230 235 240

ttc ttt att tgt ttt gtt cct ttc cat ttt gcc cga att cct tac acc 1005  
Phe Phe Ile Cys Phe Val Pro Phe His Phe Ala Arg Ile Pro Tyr Thr  
245 250 255 260

ctg agc caa acc cgg gat gtc ttt gac tgc act gct gaa aat act ctg 1053  
Leu Ser Gln Thr Arg Asp Val Phe Asp Cys Thr Ala Glu Asn Thr Leu  
265 270 275

ttc tat gtg aaa gag agc act ctg tgg tta act tcc tta aat gca tgc 1101  
Phe Tyr Val Lys Glu Ser Thr Leu Trp Leu Thr Ser Leu Asn Ala Cys  
280 285 290

ctg gat ccg ttc atc tat ttt ttc ctt tgc aag tcc ttc aga aat tcc 1149  
Leu Asp Pro Phe Ile Tyr Phe Phe Leu Cys Lys Ser Phe Arg Asn Ser  
295 300 305

ttg ata agt atg ctg aag tgc ccc aat tct gca aca tct ctg tcc cag 1197  
Leu Ile Ser Met Leu Lys Cys Pro Asn Ser Ala Thr Ser Leu Ser Gln  
310 315 320

gac aat agg aaa aaa gaa cag gat ggt gac cca aat gaa gag act 1245  
Asp Asn Arg Lys Lys Glu Gln Asp Gly Gly Asp Pro Asn Glu Glu Thr  
325 330 335 340

cca atg taaaacaaatt aactaaggaa atatttcaat ctctttgtgt tcagaactcg 1301  
Pro Met

ttaaagcaaa gcgctaagta aaaatattaa ctgacgaaga agcaactaag ttaataataa 1361  
tgactctaaa gaaacagaag attacaaaag caatttcat ttaccttcc agtatgaaaa 1421  
gctatcttaa aatatagaaa actaatctaa actgtagctg tattagcagc aaaacaaacg 1481  
acatccaatt gtcatgctgc atgcaaaact acacagaatt catgtttgg cagagtttg 1541  
gcaaaatgag taatcatata atatttactg taattttaa aatacattat cgttcacaat 1601  
tttattttt cataatcaac taaggaagaa cgatcaattt gatataatct tcttaccaaa 1661  
aatgatagtt aaaatgtata tatatcctag tcccctaacc aaatcctgac ctattggat 1721  
acttataaaa atttaagtaa gtgggataca caaagaataa taactattaa ctttcattta 1781  
ttagccaaaa acctaaggga tttaaactaa ttgaaaactgt atttgattgg acttaatttt 1841  
ttatgtttat tttagaagata aagatthaag aagaccttta caataaagag aagaaatatc 1901  
gaagtcattta aaataaggag acttactttt atgacattct aatactaaaa aatatagaaa 1961  
tatttcctta attctagaga aactagttt actaattttt tacaacttca ataataccat 2021  
cactgacact taccttattt aattagcttc tagaaaatag ctgctaatta ggttaatgaa 2081  
cattttacct tagtggaaaaaa aaattaatta aatatgatta caaagttgca cagcataact 2141  
actgagagga aagtgattga tctgtttgta attacttgg ttttgggtg tgtataaaaat 2201  
acaaatttac attaaactct aaatcattaa aaaaaaaaaa aaaaaaa 2247

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<211> 342  
<212> PRT  
<213> Homo sapiens

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Met Gln Ala Val Asp Asn Leu Thr Ser Ala Pro Gly Asn Thr Ser Leu

Cys Thr Arg Asp Tyr Lys Ile Thr Gln Val Leu Phe Pro Leu Leu Tyr  
20 25 30

Thr Val Leu Phe Phe Val Gly Leu Ile Thr Asn Gly Leu Ala Met Arg  
35 40 45

Ile Phe Phe Gln Ile Arg Ser Lys Ser Asn Phe Ile Ile Phe Leu Lys  
50 55 60

Asn Thr Val Ile Ser Asp Leu Leu Met Ile Leu Thr Phe Pro Phe Lys  
65 70 75 80

Ile Leu Ser Asp Ala Lys Leu Gly Thr Gly Pro Leu Arg Thr Phe Val  
85 90 95

Cys Gln Val Thr Ser Val Ile Phe Tyr Phe Thr Met Tyr Ile Ser Ile  
100 105 110

Ser Phe Leu Gly Leu Ile Thr Ile Asp Arg Tyr Gln Lys Thr Thr Arg  
115 120 125

Pro Phe Lys Thr Ser Asn Pro Lys Asn Leu Leu Gly Ala Lys Ile Leu  
130 135 140

Ser Val Val Ile Trp Ala Phe Met Phe Leu Leu Ser Leu Pro Asn Met  
145 150 155 160

Ile Leu Thr Asn Arg Gln Pro Arg Asp Lys Asn Val Lys Lys Cys Ser  
165 170 175

Phe Leu Lys Ser Glu Phe Gly Leu Val Trp His Glu Ile Val Asn Tyr  
180 185 190

Ile Cys Gln Val Ile Phe Trp Ile Asn Phe Leu Ile Val Ile Val Cys  
195 200 205

Tyr Thr Leu Ile Thr Lys Glu Leu Tyr Arg Ser Tyr Val Arg Thr Arg  
210 215 220

Gly Val Gly Lys Val Pro Arg Lys Lys Val Asn Val Lys Val Phe Ile

225 230 235 240

Ile Ile Ala Val Phe Phe Ile Cys Phe Val Pro Phe His Phe Ala Arg  
245 250 255

Ile Pro Tyr Thr Leu Ser Gln Thr Arg Asp Val Phe Asp Cys Thr Ala  
260 265 270

Glu Asn Thr Leu Phe Tyr Val Lys Glu Ser Thr Leu Trp Leu Thr Ser  
275 280 285

Leu Asn Ala Cys Leu Asp Pro Phe Ile Tyr Phe Phe Leu Cys Lys Ser  
290 295 300

Phe Arg Asn Ser Leu Ile Ser Met Leu Lys Cys Pro Asn Ser Ala Thr  
305 310 315 320

Ser Leu Ser Gln Asp Asn Arg Lys Lys Glu Gln Asp Gly Gly Asp Pro  
325 330 335

Asn Glu Glu Thr Pro Met  
340

<210> 3

<211> 1637

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (50)..(1201)

<400> 3

ggcacgagcc caccctgcgt cgggcctcag tcagcccccg ggggagggcc atg aac gcc 58

Met Asn Ala

1

acg ggg acc ccg gtg gcc ccc gag tcc tgc caa cag ctg gcg gcc ggc 106  
Thr Gly Thr Pro Val Ala Pro Glu Ser Cys Gln Gln Leu Ala Ala Gly

5

10

15

ggg cac agc cgg ctc att gtt ctg cac tac aac cac cac tcg ggc cgg ctg 154  
Gly His Ser Arg Leu Ile Val Leu His Tyr Asn His Ser Gly Arg Leu  
20 25 30 35

gcc ggg cgc ggg ggg ccg gag gat ggc ggc ctg ggg gcc ctg cgg ggg 202  
Ala Gly Arg Gly Gly Pro Glu Asp Gly Gly Leu Gly Ala Leu Arg Gly  
40 45 50

ctg tcg gtg gcc gcc agc tgc ctg gtg ctg gag aac ttg ctg gtg 250  
Leu Ser Val Ala Ala Ser Cys Leu Val Val Leu Glu Asn Leu Leu Val  
55 60 65

ctg qcg gcc atc acc agc cac atg cgg tcg caa cgc tgg gtc tac tat 298  
Leu Ala Ala Ile Thr Ser His Met Arg Ser Gln Arg Trp Val Tyr Tyr  
70 75 80

tgc ctg gtg aac att acg atg agt gac ctg ctc acg ggc gcg gcc tac 346  
Cys Leu Val Asn Ile Thr Met Ser Asp Leu Leu Thr Gly Ala Ala Tyr  
85 90 95

ctg gcc aac gtg ctg ctg tcg ggg gcc cgc acc ttc cgt ctg gcg ccc 394  
Leu Ala Asn Val Leu Leu Ser Gly Ala Arg Thr Phe Arg Leu Ala Pro  
100 105 110 115

gcc cag tgg ttc cta cgg aag ggc ctg ctc ttc acc gcc ctg gcc gcc 442  
Ala Gln Trp Phe Leu Arg Lys Gly Leu Leu Phe Thr Ala Leu Ala Ala  
120 125 130

tcc acc ttc agc ctg ctc ttc act gca ggg ttg cgc ttt gcc acc atg 490  
Ser Thr Phe Ser Leu Leu Phe Thr Ala Gly Leu Arg Phe Ala Thr Met  
135 140 145

gtg cgg ccg gtg gcc gag agc ggg gcc acc aag acc agc cgc gtc tac 538  
Val Arg Pro Val Ala Glu Ser Gly Ala Thr Lys Thr Ser Arg Val Tyr  
150 155 160

ggc ttc atc ggc ctc tgc tgg ctg ctg gcc gcg ctg ctg ggg atg ctg 586  
Gly Phe Ile Gly Leu Cys Trp Leu Leu Ala Ala Leu Leu Gly Met Leu  
165 170 175

cct ttg ctg ggc tgg aac tgc ctg tgc gcc ttt gac cgc tgc tcc agc 634  
Pro Leu Leu Gly Trp Asn Cys Leu Cys Ala Phe Asp Arg Cys Ser Ser  
180 185 190 195

ctt ctg ccc ctc tac tcc aag cgc tac atc ctc ttc tgc ctg gtg atc 682  
Leu Leu Pro Leu Tyr Ser Lys Arg Tyr Ile Leu Phe Cys Leu Val Ile  
200 205 210

ttc gcc ggc gtc ctg gcc acc atc atg ggc ctc tat ggg gcc atc ttc 730  
Phe Ala Gly Val Leu Ala Thr Ile Met Gly Leu Tyr Gly Ala Ile Phe  
215 220 225

cgc ctg gtg cag gcc agc ggg cag aag gcc cca cgc cca gcg gcc cgc 778  
Arg Leu Val Gln Ala Ser Gly Gln Lys Ala Pro Arg Pro Ala Ala Arg  
230 235 240

cgc aag gcc cgc cgc ctg ctg aag acg gtg ctg atg atc ctg ctg gcc 826  
Arg Lys Ala Arg Arg Leu Leu Lys Thr Val Leu Met Ile Leu Leu Ala  
245 250 255

ttc ttg gtg tgc tgg gga cca ctc ttc ggg ctg ctg ctg gcc gac gtc 874  
Phe Leu Val Cys Trp Gly Pro Leu Phe Gly Leu Leu Ala Asp Val  
260 265 270 275

ttt ggc tcc aac ctc tgg gcc cag gag tac ctg cgg ggc atg gac tgg 922  
Phe Gly Ser Asn Leu Trp Ala Gln Glu Tyr Leu Arg Gly Met Asp Trp  
280 285 290

atc ctg gcc ctg gcc gtc ctc aac tcg gcg gtc aac ccc atc atc tac 970  
Ile Leu Ala Leu Ala Val Leu Asn Ser Ala Val Asn Pro Ile Ile Tyr  
295 300 305

tcc ttc cgc agc agg gag gtg tgc aga gcc gtg ctc agc ttc ctc tgc 1018  
Ser Phe Arg Ser Arg Glu Val Cys Arg Ala Val Leu Ser Phe Leu Cys  
310 315 320

tgc ggg tgt ctc cgg ctg ggc atg cga ggg ccc ggg gac tgc ctg gcc 1066  
Cys Gly Cys Leu Arg Leu Gly Met Arg Gly Pro Gly Asp Cys Leu Ala  
325 330 335

cgg gcc gtc gag gct cac tcc gga gct tcc acc acc gac agc tct ctg 1114

Arg Ala Val Glu Ala His Ser Gly Ala Ser Thr Thr Asp Ser Ser Leu  
340 345 350 355

agg cca agg gac agc ttt cgc ggc tcc cgc tcg ctc agc ttt cgg atg 1162  
Arg Pro Arg Asp Ser Phe Arg Gly Ser Arg Ser Leu Ser Phe Arg Met  
360 365 370

cgg gag ccc ctg tcc agc atc tcc agc gtg cgg agc atc tgaagttgca 1211  
Arg Glu Pro Leu Ser Ser Ile Ser Ser Val Arg Ser Ile  
375 380

gtcttgcgtg tggatggtgc aaccaccggg tgcgtgccag gcaggccctc ctgggttaca 1271  
ggaagctgtg tgcacgcaac ctgcgcctgt atggggagca gggAACGGGA caggccccca 1331  
tggacttgcc cgggtggcctc tcggggcttc tgacgcccata tggacttgcc cattgcctat 1391  
ggctcaccct ggacaaggag gcaaccaccc caccccccgg taggagcaga gagcaccctg 1451  
gtgtggggc gagtgggttc cccacaaccc cgcttctgtg tgattctggg gaagtcccg 1511  
ccccctctcg ggcctcagta gggctccag gctgcaaggg gtggactgtg ggatgcatgc 1571  
cctggcaaca ttgaagttcg atcatggtaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1631  
aaaaaaaaa 1637

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<211> 384  
<212> PRT  
<213> Homo sapiens

<400> 4  
Met Asn Ala Thr Gly Thr Pro Val Ala Pro Glu Ser Cys Gln Gln Leu  
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Ala Ala Gly Gly His Ser Arg Leu Ile Val Leu His Tyr Asn His Ser  
20 25 30

Gly Arg Leu Ala Gly Arg Gly Gly Pro Glu Asp Gly Gly Leu Gly Ala

35

40

45

Leu Arg Gly Leu Ser Val Ala Ala Ser Cys Leu Val Val Leu Glu Asn  
50 55 60

Leu Leu Val Leu Ala Ala Ile Thr Ser His Met Arg Ser Gln Arg Trp  
65 70 75 80

Val Tyr Tyr Cys Leu Val Asn Ile Thr Met Ser Asp Leu Leu Thr Gly  
85 90 95

Ala Ala Tyr Leu Ala Asn Val Leu Leu Ser Gly Ala Arg Thr Phe Arg  
100 105 110

Leu Ala Pro Ala Gln Trp Phe Leu Arg Lys Gly Leu Leu Phe Thr Ala  
115 120 125

Leu Ala Ala Ser Thr Phe Ser Leu Leu Phe Thr Ala Gly Leu Arg Phe  
130 135 140

Ala Thr Met Val Arg Pro Val Ala Glu Ser Gly Ala Thr Lys Thr Ser  
145 150 155 160

Arg Val Tyr Gly Phe Ile Gly Leu Cys Trp Leu Leu Ala Ala Leu Leu  
165 170 175

Gly Met Leu Pro Leu Leu Gly Trp Asn Cys Leu Cys Ala Phe Asp Arg  
180 185 190

Cys Ser Ser Leu Leu Pro Leu Tyr Ser Lys Arg Tyr Ile Leu Phe Cys  
195 200 205

Leu Val Ile Phe Ala Gly Val Leu Ala Thr Ile Met Gly Leu Tyr Gly  
210 215 220

Ala Ile Phe Arg Leu Val Gln Ala Ser Gly Gln Lys Ala Pro Arg Pro  
225 230 235 240

Ala Ala Arg Arg Lys Ala Arg Arg Leu Leu Lys Thr Val Leu Met Ile  
245 250 255

Leu Leu Ala Phe Leu Val Cys Trp Gly Pro Leu Phe Gly Leu Leu Leu  
260 265 270

Ala Asp Val Phe Gly Ser Asn Leu Trp Ala Gln Glu Tyr Leu Arg Gly  
275 280 285

Met Asp Trp Ile Leu Ala Leu Ala Val Leu Asn Ser Ala Val Asn Pro  
290 295 300

Ile Ile Tyr Ser Phe Arg Ser Arg Glu Val Cys Arg Ala Val Leu Ser  
305 310 315 320

Phe Leu Cys Cys Gly Cys Leu Arg Leu Gly Met Arg Gly Pro Gly Asp  
325 330 335

Cys Leu Ala Arg Ala Val Glu Ala His Ser Gly Ala Ser Thr Thr Asp  
340 345 350

Ser Ser Leu Arg Pro Arg Asp Ser Phe Arg Gly Ser Arg Ser Leu Ser  
355 360 365

Phe Arg Met Arg Glu Pro Leu Ser Ser Ile Ser Ser Val Arg Ser Ile  
370 375 380

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<211> 28

<212> DNA

<213> Artificial

<220>

<223> Oligonucleotide primer

<400> 5

ccgaggatcc atgcaagccg tcgacaat 28

<210> 6

<211> 28

<212> DNA

<213> Artificial

<220>  
<223> Oligonucleotide primer

<400> 6  
ccgaggatcc ttacatttggaa gtctcttc

28

<210> 7  
<211> 34  
<212> DNA  
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<223> Oligonucleotide primer

<400> 7  
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34

<210> 8  
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<223> Oligonucleotide primer

<400> 8  
ccgaggatcc ttacatttggaa gtctcttc

28

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<220>  
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<400> 9  
ccgaggatcc gccatcatgc aagccgtcga caat

34

<210> 10  
<211> 55  
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<210> 11  
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<220>  
<223> Oligonucleotide primer

<400> 11  
ccgaggatcc atgaacgcca cggggacc 28

<210> 12  
<211> 28  
<212> DNA  
<213> Artificial

<220>  
<223> Oligonucleotide primer

<400> 12  
ccgaggatcc tcagatgctc cgcacgct 28

<210> 13  
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<212> DNA  
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<220>

<223> Oligonucleotide primer

<400> 13

gcgaggatcc gccatcatga acgccacggg gacc

34

<210> 14

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<223> Oligonucleotide primer

<400> 15

ccgaggatcc gccatcatga acgccacggg gacc

34

<210> 16

<211> 55

<212> DNA

<213> Artificial

<220>

<223> Oligonucleotide primer

<400> 16

ccgatctaga tcaatccat acgacgtccc agactacgct gatgctccgc acgct 55

<210> 17

<211> 348

<212> PRT

<213> Homo sapiens

<400> 17

Ile Gln Met Ala Asn Asn Phe Thr Pro Pro Ser Ala Thr Pro Gln Asn  
1 5 10 15

Asp Cys Asp Leu Tyr Ala His His Ser Thr Ala Arg Ile Val Met Pro  
20 25 30

Leu His Tyr Ser Leu Val Phe Ile Ile Gly Leu Val Gly Asn Leu Leu  
35 40 45

Ala Leu Val Val Ile Val Gln Asn Arg Lys Lys Ile Asn Ser Thr Thr  
50 55 60

Leu Tyr Ser Thr Asn Leu Val Ile Ser Asp Ile Leu Phe Thr Thr Ala  
65 70 75 80

Leu Pro Thr Arg Ile Ala Tyr Tyr Ala Met Gly Phe Asp Trp Arg Ile  
85 90 95

Gly Asp Ala Leu Cys Arg Ile Thr Ala Leu Val Phe Tyr Ile Asn Thr  
100 105 110

Tyr Ala Gly Val Asn Phe Met Thr Cys Leu Ser Ile Asp Arg Phe Ile  
115 120 125

Ala Val Val His Pro Leu Arg Tyr Asn Lys Ile Lys Arg Ile Glu His  
130 135 140

Ala Lys Gly Val Cys Ile Phe Val Trp Ile Leu Val Phe Ala Gln Thr  
145 150 155 160

Leu Pro Leu Leu Ile Asn Pro Met Ser Lys Gln Glu Ala Glu Arg Ile  
165 170 175

Thr Cys Met Glu Tyr Pro Asn Phe Glu Glu Thr Lys Ser Leu Pro Trp  
180 185 190

Ile Leu Leu Gly Ala Cys Phe Ile Gly Tyr Val Leu Pro Leu Ile Ile  
195 200 205

Ile Lys Ile Cys Tyr Ser Gln Ile Cys Cys Lys Leu Phe Arg Thr Ala  
210 215 220

Lys Gln Asn Pro Leu Thr Glu Lys Ser Gly Val Asn Lys Lys Ala Leu  
225 230 235 240

Asn Thr Ile Ile Leu Ile Ile Val Val Phe Val Leu Cys Phe Thr Pro  
245 250 255

Tyr His Val Ala Ile Ile Gln His Met Ile Lys Lys Leu Arg Phe Ser  
260 265 270

Asn Phe Leu Glu Cys Ser Gln Arg His Ser Phe Gln Ile Ser Leu His  
275 280 285

Phe Thr Val Cys Leu Met Asn Phe Asn Cys Cys Met Asp Pro Phe Ile  
290 295 300

Tyr Phe Phe Ala Cys Lys Gly Tyr Lys Arg Lys Val Met Arg Met Leu  
305 310 315 320

Lys Arg Gln Val Ser Val Ser Ile Ser Ser Ala Val Lys Ser Ala Pro  
325 330 335

Glu Glu Asn Ser Arg Glu Met Thr Glu Thr Gln Met  
340 345

<210> 18

<211> 381

<212> PRT

<213> Homo sapiens

<400> 18

Met Gly Pro Thr Ser Val Pro Leu Val Lys Ala His Arg Ser Ser Val  
1 5 10 15

Ser Asp Tyr Val Asn Tyr Asp Ile Ile Val Arg His Tyr Asn Tyr Thr  
20 25 30

Gly Lys Leu Asn Ile Ser Ala Asp Lys Glu Asn Ser Ile Lys Leu Thr  
35 40 45

Ser Val Val Phe Ile Leu Ile Cys Cys Phe Ile Ile Leu Glu Asn Ile  
50 55 60

Phe Val Leu Leu Thr Ile Trp Lys Thr Lys Lys Phe His Arg Pro Met  
65 70 75 80

Tyr Tyr Phe Ile Gly Asn Leu Ala Leu Ser Asp Leu Leu Ala Gly Val  
85 90 95

Ala Tyr Thr Ala Asn Leu Leu Ser Gly Ala Thr Thr Tyr Lys Leu  
100 105 110

Thr Pro Ala Gln Trp Phe Leu Arg Glu Gly Ser Met Phe Val Ala Leu  
115 120 125

Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile Glu Arg Tyr Ile  
130 135 140

Thr Met Leu Lys Met Lys Leu His Asn Gly Ser Asn Asn Phe Arg Leu  
145 150 155 160

Phe Leu Leu Ile Ser Ala Cys Trp Val Ile Ser Leu Ile Leu Gly Gly  
165 170 175

Leu Pro Ile Met Gly Trp Asn Cys Ile Ser Ala Leu Ser Ser Cys Ser  
180 185 190

Thr Val Leu Pro Leu Tyr His Lys His Tyr Ile Leu Phe Cys Thr Thr  
195 200 205

Val Phe Thr Leu Leu Leu Ser Ile Val Ile Leu Tyr Cys Arg Ile  
210 215 220

Tyr Ser Leu Val Arg Thr Arg Ser Arg Arg Leu Thr Phe Arg Lys Asn  
225 230 235 240

Ile Ser Lys Ala Ser Arg Ser Ser Glu Asn Val Ala Leu Leu Lys Thr  
245 250 255

Val Ile Ile Val Leu Ser Val Phe Ile Ala Cys Trp Ala Pro Leu Phe  
260 265 270

Ile Leu Leu Leu Leu Asp Val Gly Cys Lys Val Lys Thr Cys Asp Ile  
275 280 285

Leu Phe Arg Ala Glu Tyr Phe Leu Val Leu Ala Val Leu Asn Ser Gly  
290 295 300

Thr Asn Pro Ile Ile Tyr Thr Leu Thr Asn Lys Glu Met Arg Arg Ala  
305 310 315 320

Phe Ile Arg Ile Met Ser Cys Cys Lys Cys Pro Ser Gly Asp Ser Ala  
325 330 335

Gly Lys Phe Lys Arg Pro Ile Ile Ala Gly Met Glu Phe Ser Arg Ser  
340 345 350

Lys Ser Asp Asn Ser Ser His Pro Gln Lys Asp Glu Gly Asp Asn Pro  
355 360 365

Glu Thr Ile Met Ser Ser Gly Asn Val Asn Ser Ser Ser  
370 375 380